IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with strikethrough. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 16, 29 and 40 in accordance with the following:

1-15. (canceled)

16. (currently amended) A ruled line extracting apparatus, comprising:

a straight line extracting means for unit extracting information of one or more straight line patterns from an input image; and

a straight line deleting means for unit determining whether or not to delete either of a horizontal straight line pattern and a vertical straight line pattern included in the one or more straight line patterns, based on a link relationship between the horizontal straight line pattern and the vertical straight line pattern, deleting one of the horizontal straight line pattern and the vertical straight line pattern when the one of the horizontal straight line pattern and the vertical straight line pattern is isolated, and leaving the horizontal straight line pattern and the vertical straight line pattern when the horizontal straight line pattern touches the vertical straight line pattern.

17-28. (canceled)

29. (currently amended) A computer-readable storage medium, when used by a computer, to direct the computer to perform the functions of:

extracting information of one or more straight line patterns from an input image; and

determining whether or not to delete either of a horizontal straight line pattern and a vertical straight line pattern included in the one or more straight line patterns, based on a link relationship between the horizontal straight line pattern and the vertical straight line pattern, deleting one of the horizontal straight line pattern and the vertical straight line pattern when the one of the horizontal straight line pattern and the vertical straight line pattern is isolated, and leaving the horizontal straight line pattern and the vertical straight line pattern when the horizontal straight line pattern touches the vertical straight line pattern.

30-39. (canceled)

40.   (currently amended) A ruled line extracting method, comprising the steps of: extracting information of one or more straight line patterns from an input image; and determining whether or not to delete either of a horizontal straight line pattern and a vertical straight line pattern included in the one or more straight line patterns, based on a link relationship between the horizontal straight line pattern and the vertical straight line pattern, deleting one of the horizontal straight line pattern and the vertical straight line pattern when the one of the horizontal straight line pattern and the vertical straight line pattern is isolated, and leaving the horizontal straight line patter and the vertical straight line pattern when the horizontal straight line pattern touches the vertical straight line pattern.

41-44. (canceled)